# History of Electronic Filing at the USPTO

#### ù Electronic Application System (EASY) Prototype

- PTO-developed "proof-of concept" software
- System designed to easily fit into applicant's current environment
- enter bibliographic information via electronic forms
- attach word processing, graphics or special purpose files
- 140+ pilot sites
- ù Applicant input solicited early in project (Nov. 1993)

## Customer Survey Implementation

- ù 13 sites visited in May June 1994
- ù Types of firms:
  - intellectual property law firms
  - general practice law firms with an intellectual property practice
  - corporate law departments
  - sole practitioner/consultant

# Customer Survey Objectives

- ù Understand current applicant business practices
- ù Determine level of computer & communications capabilities
- ù How will electronic filing fit in the applicant's environment?

#### Customer Survey Results

- Integrate with existing systems via an interface standard
- Bi-directional and linked: send & receive electronic communication
- Security, authentication, confidentiality, assured service availability, date-time stamping
- Eliminate diskettes as rapidly as possible
- Establish requirements for legal electronic records

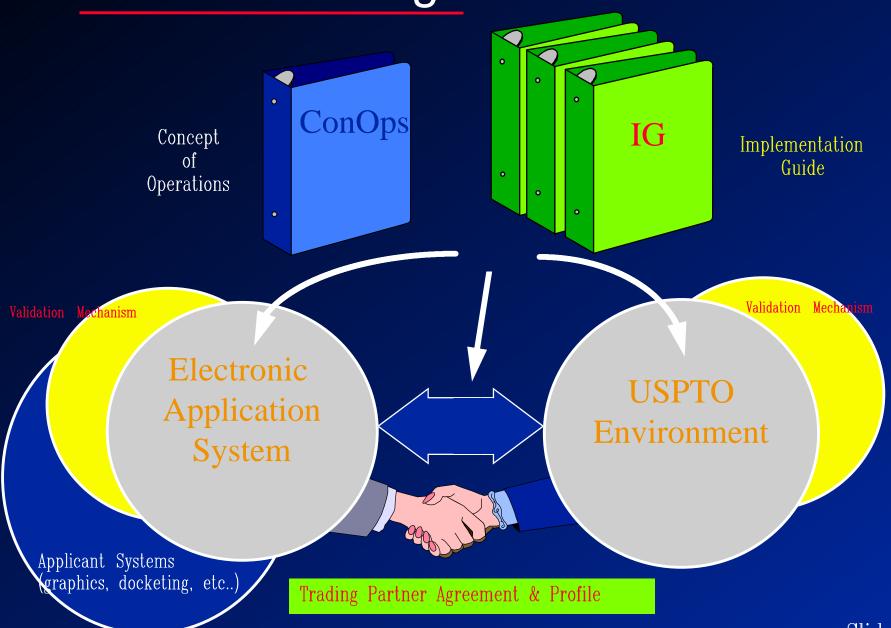
## More Customer Survey Results

- ù Anticipate/include evolving standards and graphics
- ù Software developed by private industry
- ù Provide incentives
- ù Culture of PTO = applicant's business processes
- ù Customers want seamless electronic systems: electronic filing, funds transfer, records management, case processing, info. dissemination, etc.

## Electronic Filing – Project Phases

- ù Phase 1: Prototype (electronic forms)
- ù Phase 2:
  - Complete "Implementation Guide for Electronic Filing"
  - Develop production version 1.0 of EASY/EPO software
  - Identify and solve Phase 3 and 4 issues
- ù Phase 3: Paperless Filing
- ù Phase 4: On-Line Filing

#### Electronic Filing

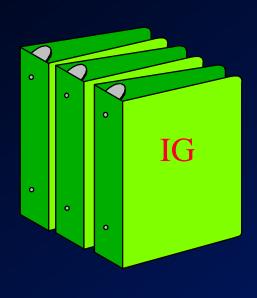


#### **Concept of Operations**



- High-level view of "how electronic filing will work"
- Targeted to applicant community (e.g., attorneys, agents, managers)
- Describes technologies and guiding principles
- Companion to Implementation Guide

#### Implementation Guide



- Complete technical detail for implementing an electronic application system
- Targeted to Information Systems departments, third-party vendors and system integrators
- Technical detail transparent to customers
- Uses existing standards and specifications
- Defines phased approach

### Concept Supports Customer Requirements

Survey Results	Concept of Operations Approach Electronic Filing Capability
Integrate with applicant's existing systems	Implementation Guide defines data formats and interface, applicant system not specified
Bi-directional communications and linked documents	Fundamental capability
Security, authentication, confidentiality, assured service availability, date-time stamping	Value-Added Networks (VANs) provide these features, as well as Electronic Funds Transfer
Move beyond diskettes ASAP	On-line communication preferred, diskettes acceptable
Requirements for legal records	"Commitment capable" software
Forward-looking <u>re</u> standards & graphics	Open systems architecture
Market-developed tools	Based on accepted standards: COTS pieces exist and will evolve

#### Phase 3 & 4 Issues

- ù Pageless representation of intellectual property information
- ù Allowable electronic interchange media (focusing on floppy diskette filing)
- ù Electronic Commerce Security Issues
  - Integrity
  - Confidentiality
  - Availability
  - Originator authentication
  - Non-repudiation
- ù Allowable File Formats
- ù Universal Electronic Filing Interchange Data Dictionary

## Next Steps

- ù Public comment on Implementation Guide (USPTO)
- ù Resolve issues for on-line filing (Note: they have been identified)
- ù Develop on-filing IG (target: June 1997)